(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 26 February 2004 (26.02.2004)

PCT

(10) International Publication Number WO 2004/016835 A1

(51) International Patent Classification⁷: C04B 35/584

C30B 15/10,

(21) International Application Number:

PCT/NO2003/000274

- (22) International Filing Date: 13 August 2003 (13.08.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

20023865

15 August 2002 (15.08.2002) NO

- (71) Applicant (for all designated States except US): CRUSIN AS [NO/NO]; Sem Saelandsvei 12, N-7465 Trondheim (NO).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): OLSEN, Espen [NO/NO]; Eidsvollsgt. 14, N-7030 Trondheim (NO). SOLHEIM, Arve [NO/NO]; Martin Kregnesv. 31, N-7091 Tiller (NO). SØRHEIM, Håvard [NO/NO];
 - Høiliveien 12, N-7052 Trondheim (NO).

(74) Agent: VINDENES, Magne; Elkem ASA Patent Department, P.O. Box 8040 Vågsbygd, N-4675 Kristiansand (NO).

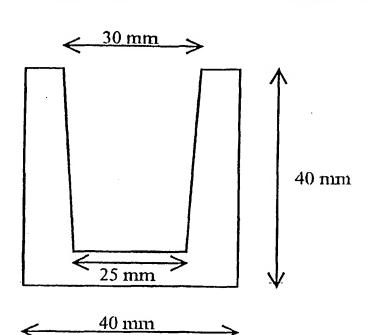
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MOULD PARTS OF SILICON NITRIDE AND METHOD FOR PRODUCING SUCH MOULD PARTS



(57) Abstract: The present invention relates to silicon nitride mould parts, particularly crucibles for use in connection with directional solidification and pulling of silicon single crystals. The mould parts consist of Si_3N_4 having a total open porosity between 40 and 60% by volume and where more than 50% of the pores in the surface of the mould parts have a size which is larger than the means size of the Si_3N_4 particles. The invention further relates to a method for producing the silicon nitride mould parts.

WO 2004/016835 A1 |||||||